



University of HUDDERSFIELD

University of Huddersfield Repository

Humphreys, Paul and Nightingale, Aaron

Combining sporicidal products with ultrasonic cleaning

Original Citation

Humphreys, Paul and Nightingale, Aaron (2013) Combining sporicidal products with ultrasonic cleaning. In: IPS 2013, 30th September - 2nd October 2013, London, UK. (Unpublished)

This version is available at <http://eprints.hud.ac.uk/id/eprint/18813/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

Combining Sporicidal Products with Ultrasonic Cleaning

Large Equipment ?

Quick Efficient Cleaning ?

Disinfection ?

Ultrasound Technology

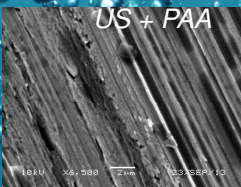
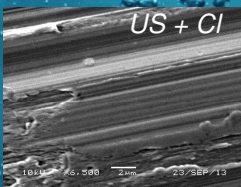
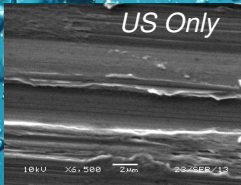
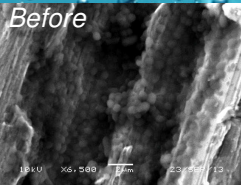
C. difficile spores represent the greatest disinfection challenge.

Chlorine or Peracetic Acid

US

VS

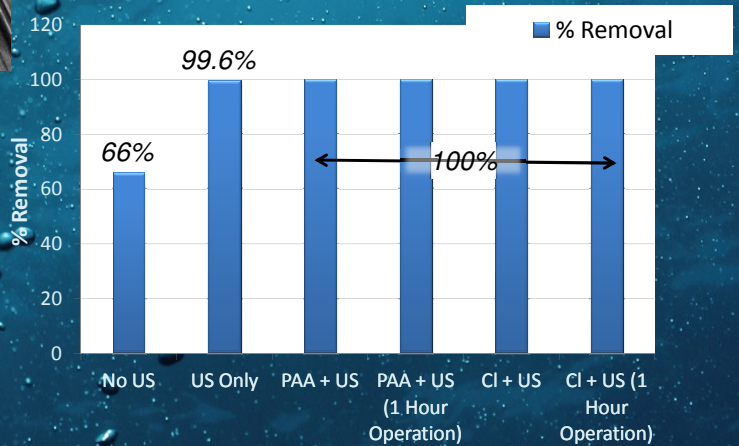
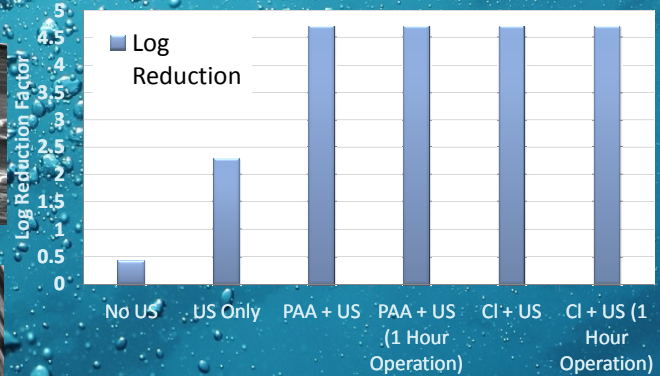
C. difficile Spores



- 2 cm dia steel discs.
- *C. difficile* spores + BSA & Sheep blood.
- Dried to surface
- Treated for up to 5 minutes.

- Initial concentrations of 500 ppm PAA & 250 ppm available chlorine. Approximately 25% or recommended value.
- Bath run at 50°C as per manufacturers instructions.

- US removed ≈99% of spores within 5 minutes.
- Sporicides required to achieve complete removal over same period.
- Sporicides remained effective for up to 1 hour.
- Some odour issues observed with some chlorine based products.



Dr Paul Humphreys,
 Aaron Nightingale
 Hygiene and Disinfection Centre,
 University of Huddersfield. p.n.humphreys@hud.ac.uk



University of
 HUDDERSFIELD